



Bash Workshop

UVic Web Dev Club

Slides: <http://bit.ly/bashworkshop>

Github: <https://github.com/uvicwebdev/bash-intro>



Bash History - Bourne Again Shell

A shell or “command-line interpreter” is the interface you interact with.

The first UNIX shell was called the V6 shell (SH) and was invented by Ken Thompson (of Bell Labs) in 1971.

There are many popular shells like: BASH, CSH, and ZSH (1990).

BASH is the most common and often used as a default. BASH was invented in 1977.



Terminal History

Definition: Technically, A terminal window, also referred to as a terminal emulator, is a text-only window in a graphical user interface (GUI) that emulates a console.

OR A program that runs the shell.



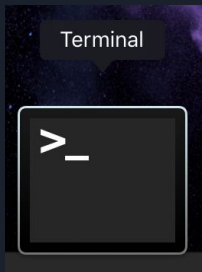
Console History

Definition: Is an all-text mode user interface that occupies the entire screen of the display device and which does not sit on top of a GUI.

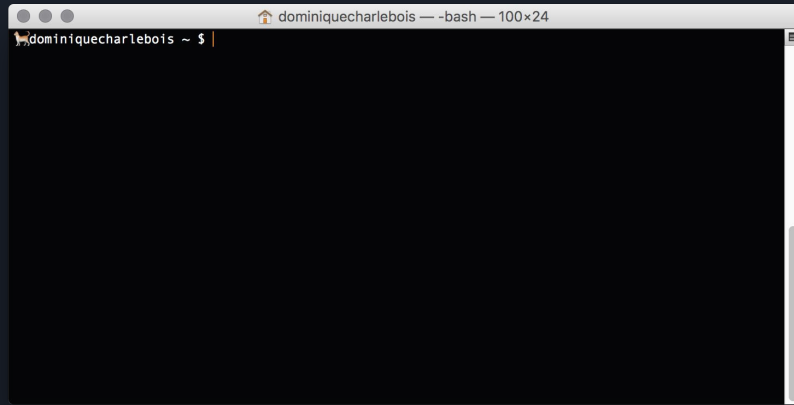
Prior to the launching of the Apple Macintosh in 1984, virtually all computer displays were consoles.

Let's Get Started!

Open your terminal!



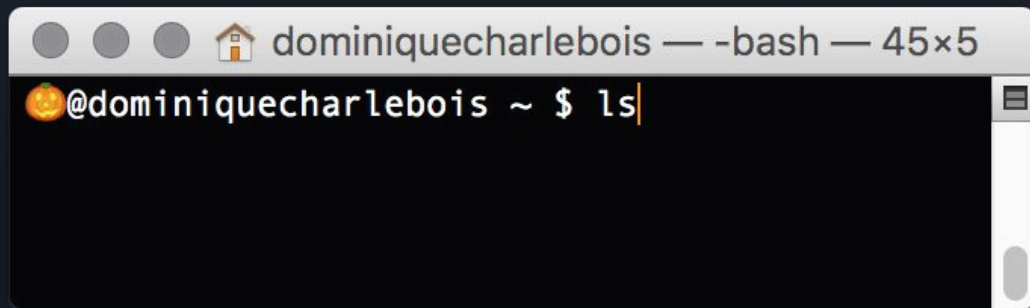
It should look something like this (but not quite)!





Commands

In the command line type “ls”



```
dominiquecharlebois — -bash — 45x5  
👤@dominiquecharlebois ~ $ ls|
```

A terminal window with a title bar containing three window control buttons, a home icon, and the text "dominiquecharlebois — -bash — 45x5". The terminal content shows a prompt "👤@dominiquecharlebois ~ \$" followed by the command "ls|" with a vertical cursor at the end. A scrollbar is visible on the right side of the terminal.



PRACTICE

- `ls`
 - list all files and folders in directory
- `cd`
 - change directory
- `mkdir`
 - Create a new folder
- `touch`
 - Create a new file
- `cp`
 - Copy a file
- `mv`
 - Move a file or folder

More Available Here:

https://learncodethehardway.org/unix/bash_cheat_sheet.pdf



.bash_profile vs .bashrc

.bash_profile is executed for login shells

.bashrc is executed for interactive non-login shells



Which One?

It is totally up to you. They both serve different purposes.

Note: On OS X the terminal by default runs a login shell every time, so I will be using `.bash_profile`, but you may wish to use `.bashrc`



CUSTOMIZE PS1

The default looks something like this: `MacBook:~/Desktop Admin$`

Open either `.bash_profile` or `.bashrc`: `open ~/.bash_profile`

- This will open in your default text editor (probably vim), so instead of “open” you can type “nano”.

Type in: `export PS1=" "`

- This will be where we add the customization.

- \d
 - Current date
- \t
 - Current time
- \h
 - Host name
- \#
 - Command number
- \u
 - User Name
- \W
 - Current working directory
- \w
 - Current working directory with full path



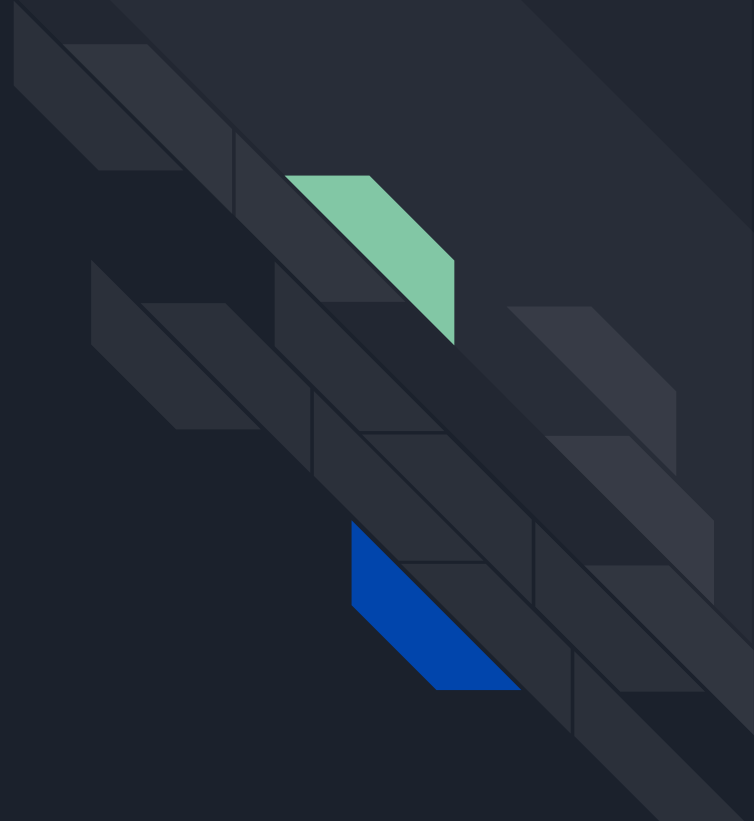
In order to see these changes you will need to save the file and “reload” your terminal.

Option 1

- Typing in: `source ~/.bash_profile`

Option 2

- Quit the terminal and re-open





CUSTOMIZE COMMANDS

You can also “shorten” commands by creating alias.

Ex. `alias ga="git add ."`

So now you can type “ga” instead of “git add .”



What is next?

Explore “alternative terminals” such as HyperTerm, iTerm, iTerm2, etc.

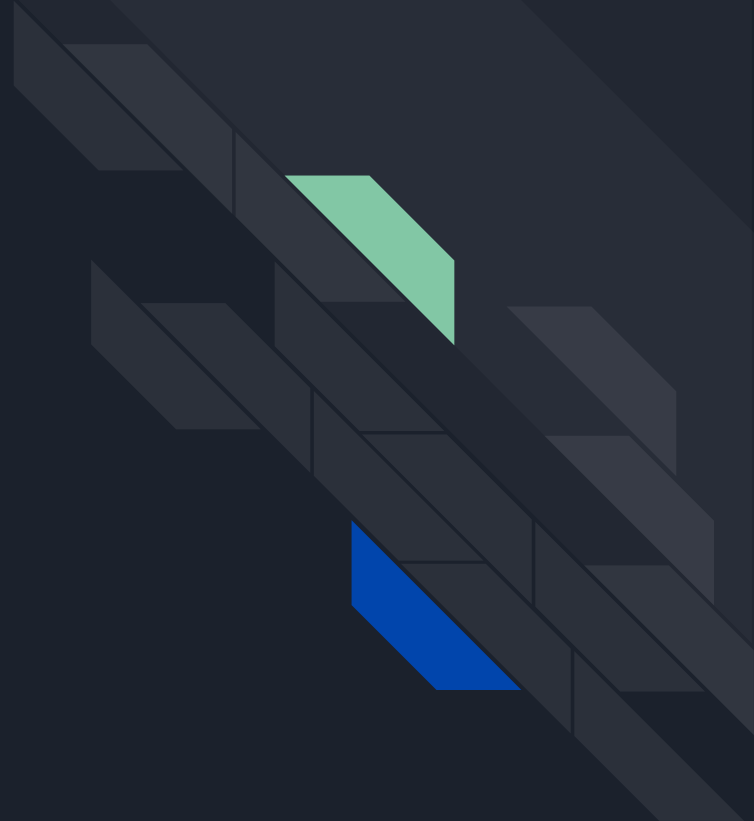
Explore “frameworks” such as oh my ZSH!, Bang.sh, etc.


Explore “Package Managers” such as homebrew, macports, etc.

Hackathing UVic 2017

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www.hackathinguvic.com



A blue parallelogram and a light green parallelogram are positioned in the top-left corner of the slide. The background is a dark navy blue with several diagonal lines in a lighter shade of blue and grey extending from the bottom-left towards the center.

Thank You UVic Web Dev Club



Join Us Next Week
ECS 104 @ 6pm

References

<https://www.ibm.com/developerworks/library/l-linux-shells/index.html>

<https://programminghistorian.org/lessons/intro-to-bash>

[https://learncodethehardway.org/unix/bash cheat sheet.pdf](https://learncodethehardway.org/unix/bash%20cheat%20sheet.pdf)

<https://gist.github.com/stephenll/8762279>

<https://apple.stackexchange.com/questions/51036/what-is-the-difference-between-bash-profile-and-bashrc>

[https://learncodethehardway.org/unix/bash cheat sheet.pdf](https://learncodethehardway.org/unix/bash%20cheat%20sheet.pdf)

[http://www.linfo.org/terminal window.html](http://www.linfo.org/terminal_window.html)

<http://hawker.me/PimpMyShell-Talk/>